facility may have resulted from one or more of the following:

leaking underground tanks and/or pipelines, and/or surface

spills.

## B. Enforcement History

- 1. By February 1989, general notice letters had been sent by EPA to thirty-four (34) potentially responsible parties, including each of the Respondents, with the exception of the Antonini Family Trust.
- 2. In accordance with CERCLA Section 122, 42 U.S.C. § 9622, EPA issued thirty-two (32) special notice letters to potentially responsible parties. Respondents received special notice letters in May 1989, with the exception of the Antonini Family Trust, which received a special notice letter in July 1989. The statutory deadline of sixty days for the potentially responsible parties to make a proposal to undertake or finance the remedial action, contained in CERCLA Section 122(e)(2)(B), was extended by EPA at the request of numerous potentially responsible parties. By the extended deadline, EPA received good faith offers to undertake or finance part of the interim remedial action from four potentially responsible parties. Good faith offers were not received from any of the Respondents.
- 3. On or about March 25, 1992, the Federal District Court for the Central District of California entered a Consent Decree (the "Decree") signed by EPA, the Lockheed Corporation ("Lockheed"), the City of Burbank (the "City") and Weber Aircraft, Inc. ("Weber"), under which Lockheed and the City agreed to implement, and Lockheed, the City and Weber agreed to finance, a portion of the interim remedial action specified in the ROD and ESD. The

Decree was entered pursuant to CERCLA Section 122, 42 U.S.C. § 9622; it is attached hereto as Attachment B and incorporated herein by reference. Section VII, Subpart F of the Decree included some minor modifications to the interim remedy. The Consent Decree does not cover the design, construction or nonroutine maintenance of the blending facility for nitrate, related water transport and receiving facilities, and certain monitoring. These activities are required to be performed pursuant to this Order. The United States took public comment on the Decree and submitted all comments received and its reply to such comments to the Federal District Court prior to the entry of the Decree by the Court.

# C. Endangerment to Human Health and the Environment

- 1. Concentrations of volatile organic compounds ("VOCs") exceeding State Action Levels ("SALs") and Federal Maximum

  Contaminant Levels ("MCLs") were first discovered in the Basin in 1980. Since that time, EPA and the State have conducted soil and groundwater sampling in the Burbank area. Presently, VOC family members trichloroethene ("TCE") and tetrachloroethene ("PCE") have been found in the Burbank Well Field at levels that exceed the SALs and MCLs for these hazardous substances.
- 2. The maximum concentrations of TCE and PCE found in the City's Public Service Department ("PSD") wells were 1,800 micrograms per liter (" $\mu$ g/L") and 590  $\mu$ g/L, respectively. The MCL and SAL for both TCE and PCE is 5  $\mu$ g/L. Several other VOCs have been detected at levels below MCLs in the Burbank PSD wells, including acetone, toluene, methyl ethyl ketone ("MEK"), carbon tetrachloride, and trihalomethanes. Because TCE and PCE have

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27 28 the endangerment information provided here focuses on these two hazardous substances. Some of the other hazardous substances found at the Site are also listed.

- a. Based upon evidence of animal carcinogenicity and preliminary data on human subjects, EPA has determined that TCE and PCE are probable human carcinogens.
- b. Trichloroethene ("TCE"). TCE is a central nervous system depressant following acute or chronic exposure. Industrial use of TCE may also result in dermatitis from exposure to vapors of concentrated solvent. In mice, an increased incidence of hepatocellular carcinomas was reported following oral administration of TCE.
- c. Tetrachloroethene ("PCE"). PCE results in an increased incidence of hepatocellular carcinoma in mice. Toxic effect in humans and animals from both acute and chronic exposure to PCE include central nervous system depression, and liver and kidney damage.
- Dichloroethene ("DCE"). DCE has been reported to significantly increase the incidence of kidney tumors in male mice. DCE is mutagenic and has caused adverse reproductive effects in rats and rabbits. Chronic exposure to DCE causes liver damage, and acute exposure to high doses produces nervous system damage. EPA has classified DCE as a possible human carcinogen. EPA has established a drinking water MCL of 7 ppb and the State of California has established a State MCL of 6 ppb for 1,1-DCE.
  - Trichloroethane ("TCA"). TCA has been associated

with central nervous system depression and cardiovascular effects, including premature ventricular contractions and arrhythmias from exposure to high levels. EPA has established a drinking water MCL of 200 ppb for 1,1,1-TCA.

- an increase in kidney epithelial tumors in rats and hepatocellular tumors in mice. Evidence from human epidemiological studies suggests that exposure to chloroform in water supplies may be associated with increased incidences of bladder, colon, and rectal tumors. Acute exposure to high concentrations of chloroform in humans may result in death caused by ventricular fibrillation. Chronic exposure to lower concentrations may lead to hepatic, renal, and cardiac effects, and central nervous system depression. EPA has classified chloroform as a probable human carcinogen. EPA has established a drinking water MCL of 100 ppb for total trihalomethanes (chloroform is one of the four trihalomethanes included in this regulation).
- groundwater contamination occurred in 1985. By 1991, all of the City's wells had been taken out of service due to high levels of TCE and PCE in the water at the Site. The plume of contamination continues to spread toward downgradient production wells operated by the Cities of Glendale and Los Angeles, threatening these public drinking water sources. The interim remedial action is necessary to inhibit the further migration of contamination.
- 4. There have been releases of hazardous substances from each of the facilities listed in Paragraph II.A.12, above, into

the soil and groundwater at the Site. There continue to be releases and the threat of releases from each of these facilities into the groundwater at the Site. Hazardous substances from each of the referenced facilities have commingled at the Site, forming a mass of contaminated groundwater (the "Burbank Operable Unit Plume"). The Burbank Operable Unit Plume contains hazardous substances that continue to release and/or that threaten further releases into the environment in the area of the Site through migration of the plume.

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- may present an imminent and substantial endangerment to public health due to the contamination of groundwater in the area, including contamination of the City's drinking water supply, as well as the threat of contamination of the water supplies of the Cities of Glendale and Los Angeles, located downgradient of the City of Burbank's supply wells. If remedial action is not taken, these residents may be exposed to contaminated groundwater at or from the Burbank Operable Unit Plume through ingestion of, inhalation of, and dermal contact with contaminated water. Each of these pathways represents a distinct risk to public health. The residents of the Cities of Glendale and Los Angeles also face the threat of future exposure through similar routes if the selected interim action is not implemented.
- 6. The releases and threat of releases at the Site may also present an imminent and substantial endangerment to the environment in the area of the Site because of the ongoing releases and/or threat of releases from the Plume. Without the institution of the interim remedial action, the ecosystem in the

area of the Site is threatened by the potential exposure to extracted, untreated water, which may reach areas of ecological concern, including the Los Angeles River.

### III. CONCLUSIONS OF LAW

- A. The Burbank OU Site, and each facility described in Paragraph II.A.12 above, is a "facility" as that term is defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- B. Each Respondent is a "person" as defined in Paragraph 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- C. Each of the Respondents is a "liable person" within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3), and is subject to this Order pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- D. The substances listed in Paragraph II.C.2 are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- E. There have been and continue to be "releases" and the threat of "releases" of hazardous substances, within the meaning of Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), into the environment from each of the facilities referenced in Paragraph II.A.12. The hazardous substances released from these facilities have become commingled in the groundwater plume in such a way as to represent an indivisible injury.
- F. There have been and continue to be "releases" and the threat of "releases" within the meaning of Section 101(22) of CERCLA, 42 U.S.C. § 9601(22), of hazardous substances listed in Paragraphs II.C.2 from the Site into the environment surrounding the Plume. The continued migration of hazardous substances from

the Site constitutes a "release," within the meaning of CERCLA Section 101(22), 42 U.S.C. § 9601(22).

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#### IV. DETERMINATIONS

- A. Based on the Findings of Fact and Conclusions of Law, the Director of the Hazardous Waste Management Division, EPA Region IX, hereby determines that the release and/or threat of release of one or more hazardous substances from and within the Site may present an imminent and substantial endangerment to public health, welfare or the environment. The groundwater contamination at this Site and the resulting endangerment constitute an indivisible injury.
- B. The remedial measures required by this Order, if performed in accordance with the requirements of this Order, are necessary to protect the public health, welfare and the environment.
- C. The remedial measures required by this Order are consistent with CERCLA and the NCP.

## V. NOTICE TO THE STATE

Prior to issuing this order, EPA notified the State of California, California Environmental Protection Agency pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), of EPA's intent to issue this Order.

## VI. ORDER

Based on the foregoing, Respondents are hereby ordered to comply with the following provisions, including but not limited to all requirements, schedules and deadlines contained in this Order, incorporated into this Order by reference, submitted or 28 prepared by Respondents and approved by EPA pursuant to this

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Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promul-

gated under CERCLA shall have the meaning assigned to them in the

VII. DEFINITIONS

statute or its implementing regulations. Whenever terms listed

below are used in this Order or in the documents attached to this

Order or incorporated by reference into this Order (other than

the Consent Decree, including all of its appendices, attached as

Attachment B), the definitions which follow shall apply. Any

word used in the Consent Decree that is defined in the Decree,

shall have the meaning provided for it in the Decree when used in

the Decree.

- A. "Burbank Well Field" or "Well Field" shall mean the area within the political boundaries of the City encompassing Burbank Public Service Department wells 6A, 7, 10, 11A, 12, 13A, 14A, 15, 17, and 18, as shown on Appendix C to the Decree, which is incorporated herein as Attachment B. (This Appendix contains corrections to the well numbers shown in Figure 2 of the ESD).
- B. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
- C. "City" shall mean the City of Burbank, California, a charter city, and any of its divisions, departments and other subdivisions. "City" shall not include any joint powers authority of which the City of Burbank is a member.
- D. "Consent Decree" or "Decree" shall mean the Consent Decree entered by the Federal District Court for the Central

- E. "Day" shall mean a calendar day, unless expressly stated to be a working day; provided, however, that in computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.
- F. "Environment" shall have the meaning set forth in CERCLA Section 101(8), 42 U.S.C. § 9601(8).
- G. "EPA" shall mean the United States Environmental Protection Agency.
- H. "Explanation of Significant Differences" ("ESD") shall mean the document signed by the EPA Region IX Regional Administrator on November 21, 1990 which modifies the ROD and is attached as Appendix B to the Consent Decree.
- I. "Fund" or "Superfund" shall mean the Hazardous Substance Superfund, referenced in Section 111 of CERCLA, 42 U.S.C. § 9611.
- J. "Lockheed" shall mean the Lockheed Corporation, incorporated in the state of Delaware, and any of its subsidiaries, parents, affiliates, predecessors and successors.
- K. "National Contingency Plan" or "NCP" shall mean the National Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300.
- L. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral.
  - M. "Performance Standards" shall mean those cleanup

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standards, standards of control, and other substantive requirements, criteria or limitations, identified in the ROD, ESD and this Order, that the Work required by this Order must attain and maintain.

- N. "Point of Delivery" shall mean the physical point of transfer of the groundwater treated by Lockheed from Lockheed to the City. For the purposes of this Order, such transfer shall take place at the downstream flange of a meter that is located between the groundwater Treatment Plant built by Lockheed and the Valley Forebay Facility and is used to measure the quantity of water to be transferred, as depicted in Appendix E to the Decree.
- O. "Point of Interconnection" shall mean the physical point of transfer of the groundwater treated by Lockheed after it goes through the booster station but before it enters the blending facilities to be constructed pursuant to this Order. purposes of this Order, such transfer shall take place at the upstream flange of a water meter located on a pipeline between the booster station and the blending facilities and used to measure the quantity of water to be transferred, as depicted in Appendix E to the Decree.
- P. "Point of MWD Connection" shall mean the physical point of transfer of the Metropolitan Water District ("MWD") blending water from the MWD pipeline to the blending facilities to be constructed pursuant to this Order. For the purposes of this Order, such transfer shall take place at the downstream flange of a meter that is located between the MWD pipeline and the blending facilities and is used to measure the quantity of water to be transferred, as depicted in Appendix E to the Decree.

Q. "Point of Water System Introduction" shall mean the physical point of transfer of the blended water from the blending facilities to be constructed pursuant to this Order to the City's public water supply distribution system. For the purposes of this Order, such transfer shall take place at the downstream flange of a valve located on the pipeline between the blending facilities and the City's public water supply distribution system, as depicted in Appendix E to the Decree.

R. "Record of Decision" ("ROD") shall mean the document signed on June 30, 1989, by the EPA Region IX Deputy Regional Administrator, acting for the Regional Administrator, which is attached as Appendix A to the Decree.

- S. "Release" shall have the meaning set forth in CERCLA Section 101(22), 42 U.S.C. § 9601(22).
- T. "Remedial Action Work" shall mean those activities to be undertaken by Respondents to implement the final plans and specifications submitted by Respondents pursuant to the Remedial Design Nork Plan approved by EPA pursuant to Section X (Work To Be Performed) of this Order. The Remedial Action Work does not constitute all of the interim remedial action selected in the ROD (as modified by the ESD).
- U. "Remedial Design Work" shall mean the phase of the Work required by this Order wherein, consistent with the ROD (as modified by the ESD), this Order and the National Contingency Plan, 40 C.F.R. Section 300 et seg. ("NCP"), the engineering plans and technical specifications are to be developed by Respondents for approval by EPA, and on which implementation of the Remedial Action Work shall be based.

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- V. "Respondents" shall mean those parties listed as such in Subpart I.C of this Order.
- W. "Section" shall mean a portion of this Order identified by a Roman numeral.
- X. "Site" (when capitalized) or "Burbank Operable Unit Site" shall mean the areal extent of TCE and/or PCE groundwater contamination that is presently located in the vicinity of the Burbank Well Field and including any areas to which such groundwater contamination migrates.
- Y. "State" (when capitalized) shall mean the State of California.
- Z. "Subpart" shall mean a portion of this Order identified by a capital letter.
  - AA. "United States" shall mean the United States of America.
- AB. "Valley Forebay Facility" shall mean the structure owned by the City and designated to receive the water treated by Lockheed as a regulating reservoir for the booster station depicted in Appendix E to the Decree. The reservoir has an overflow elevation of 655 feet.
- AC. "Weber" shall mean Weber Aircraft, Inc., incorporated in the state of Delaware, and any of its subsidiaries, parents, affiliates, predecessors and successors.
- AD. "Work" shall mean the performance of the Remedial Design Work and the Remedial Action Work in a manner which accomplishes all of the requirements of Section X (Work To Be Performed) of this Order.
- AE. "Working Day" shall mean a day other than a Saturday, 28 Sunday, or federal or State holiday.